ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397

JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

217/782-0610

August 15, 2019

U.S. Environmental Protection Agency
Attention: 5N – 15J Steve Jann, Chief
NPDES Programs Branch
Region V
77 West Jackson Boulevard
Chicago, Illinois 60604

Re: JBS Swift Pork Company
NPDES Permit No. IL0023914
Draft Reissued Permit Notification

Gentlemen:

In accordance with our agreement, we hereby submit for approval, a Public Notice Permit and Public Notice/Fact Sheet for the above subject discharger. The IEPA fully expects to receive either an approval letter or a letter stating objections to the Permit within 45 days of the date of this letter.

Should this understanding be incorrect, any verbal comments can be directed to Jenny Larsen at 217/782-0610.

Sincerely,

Darin E. LeCrone/JML

Darin E. LeCrone, P.E.
Manager, Industrial Unit, Permit Section
Division of Water Pollution Control

DEL:JML:19072601.docx

Attachments: Draft Permit, Public Notice/Fact Sheet, Additional Backup Material

cc: Records Unit

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY

INDUSTRIAL NPDES PERMIT REVIEW NOTES

I. PERMITTEE: JBS Swift Pork Co. PERMIT NO.: IL0023914
FACILITY NAME: JBS Swift Pork Company
CITY: Beardstown COUNTY: Cass
FACILITY CONTACT: Matt Stroub PHONE NO.: (217)323-6303
MAJOR ☐ MINOR ☒ NEW ☐ REISSUED ☒ MODIFIED ☐
SIC CODE: 2011 SIC CATEGORY: Meat Packing Plant - Pork
BRIEF DESCRIPTION OF MANUFACTURING OPERATIONS AND DISCHARGE SOURCES:
The facility is a pork processing facility which includes animal holding, slaughtering, eviscerating, trimming, cutting, blood rendering and by-products recovery. Process wastewater is generated from the production of fresh pork products, pork trimmings, organs, dried blood, blood by-products and edible and inedible rendering products.

II. NAME OF RECEIVING STREAM: Unnamed Tributary to the Illinois River
USE CLASSIFICATION: GENERAL USE ☒ SECONDARY CONTACT ☐
OTHER USE ☐
7Q10: 0 cfs SOURCE OF DATA: 10/26/18 Email from Abby
NAME OF RECEIVING STREAM: Illinois River
USE CLASSIFICATION: GENERAL USE ☒ SECONDARY CONTACT ☐
OTHER USE ☐
7Q10: 3495 cfs SOURCE OF DATA: 6/11/2019 WQS memo
NOTIFICATIONS NEEDED: BORDERING STATE ☐ DRSCW ☐ CMAP ☐
SWIMRPC ☐ GERPDC ☐
IS THE FACILITY LOCATED IN AN EJ AREA? YES ☐ NO ☒

III. FEDERAL CATEGORICAL STANDARDS APPLY: YES ☒ NO ☐
40 CFR: 432 CATEGORY: Subpart B – Complex Slaughterhouses
ADDITIONAL INFO: Subpar J – Renderers is not applicable because rendering activities are in conjunction with the slaughterhouse therefore the facility does not meet the definition of a renderer found at 40 CFR 432.101(b).
FEDERAL PRODUCTION-BASED CATEGORICAL STANDARDS: YES ☒ NO ☐
PRODUCTION RATES: 5,318,181 lbs LWK/day (no ELWK). 1,404 million lbs LWK/year

IV. STORMWATER CLASSIFICATION: NOT COVERED ☐ CATEGORY i – xi ☒ (xi)

APPLICATION RECEIVED: YES ☒ NO ☐
NO EXPOSURE CERTIFICATE: YES ☐ NO ☐ NOT APPLICABLE ☒
IS THERE EXPOSURE: YES ☒ NO ☐ UNKNOWN ☐
ADDITIONAL INFORMATION: n/a

IEPA Permit Reviewer: Jenny Larsen Date: 7/2/6/2019

V. OUTFALL NO.: 001 NAME: Stormwater Runoff and Spray Irrigation Runoff DAF: 0.006 MGD
LATITUDE: 39° 59' 55" North LONGITUDE: 90° 25' 00" West
OUTFALL NO.: 002 NAME: Wastewater Treatment Plant Effluent and Stormwater DAF: 2.0 MGD
LATITUDE: 40° 00' 48" North LONGITUDE: 90° 26' 46" West
IF CHANGE FROM PREVIOUS PERMIT DESCRIBE REASON: Outfall A01 was removed from the permit as non-contact cooling water is now routed to the wastewater treatment plant which eventually discharges to Outfall 002. Outfall 002 listed wastestreams were changed from treated process wastewater to wastewater treatment plant effluent as not all wastewater is considered process wastewater from the wastewater treatment plant.

VI. EVALUATION FOR WATER QUALITY-BASED LIMITS NEEDED: YES ☒ NO ☐
DATE REQUESTED FROM PLANNING: 10/29/2018 DATE RECEIVED: 06/11/2019
BIOMONITORING DATA AVAILABLE: YES ☐ NO ☒
ATTACHMENTS:
- ☐ FLOW DIAGRAM OF WASTE SOURCES OR TREATMENT PROCESSES
- ☐ DMR SUMMARY
- ☒ WQBEL RECOMMENDATION
- ☒ 303(d) INFORMATION
- ☐ ADDITIVES REVIEW
- ☐ ANTI-DEG. REVIEW
- ☐ OTHER:

DISCUSSION OF PARAMETERS CONSIDERED FOR REGULATION:

CBOD was limited in the existing permit rather than BOD due to an April 14, 2004 letter signed by Michael Richtig of the Excel Corporation requesting that CBOD be used rather than BOD, because nitrification was occurring and skewing their BOD results. Therefore, CBOD will continue to be limited rather than BOD.

A limit for total residual chlorine was considered for discharges from the wastewater treatment plant, however ultraviolet disinfection is utilized rather than chlorination. Therefore, no TRC limit will be included in the permit.

A dissolved oxygen limit was considered because sanitary wastewater is discharged at Outfall 002 but deemed to be unnecessary because the dilution ratio of the 7Q10 flow (3,633.89 cfs) of the Illinois River to the maximum proposed discharged from outfall 001 (2.5 MGD) is much greater than a 5 to 1 dilution ratio. No dissolved oxygen limit will be put in the permit.

The water quality standards unit reviewed the past five years of metals data to determine if a reasonable potential exists to exceed water quality standards in a memo dated June 11, 2019. The memo concluded that there is no reasonable potential to exceed water quality standards outside of allowed mixing and therefore no metals limits will be introduced to the permit. However, continued semi-annual monitoring at outfall 002 will remain in the permit.

Ammonia water quality based effluent limits were re-evaluated in the previously mentioned June 11, 2019 water quality standards memo and were modified accordingly for outfalls 001 and 002.

The permittee will continue to be required to sample quarterly for total nitrogen and phosphorus at outfall 002 and will be required to develop and submit to the Agency a total nitrogen and phosphorus optimization plan. In developing the plan, the permittee shall evaluate a range of measures for reducing phosphorus and total nitrogen discharges from the treatment plant, including possible source reduction measures, operational improvements, and minor facility modifications that will optimize reductions and phosphorus and total nitrogen discharges from the wastewater treatment facility. The permittee will also be required to submit a feasibility study that identifies methods, timeframes and costs of reducing phosphorus levels in its effluent to a level meeting the future limit of 1 mg/L, 0.5 mg/L, and 0.1 mg/L and reducing total nitrogen levels to a future target concentration of 10 mg/L.

Non-Contact Cooling Water previously discharged to outfall A01 has been routed to the wastewater treatment plant tributary to outfall 002 per phone conversation with Matt Stroub on 7/24/2019. Therefore Outfall A01 was removed from the permit. Temperature limits were added to outfall 002 to ensure temperature water quality standards are met.

A portion of the fully treated wastewater treatment effluent is used as spray irrigation wastewater per Matthew Stroub see attachments to 11/2/2018 email. As some of the wastewater directed to the wastewater treatment effluent is considered process wastewater, the discharge at outfall 001 is subject to categorical based effluent limits in 40 CFR 432. Therefore, a total nitrogen concentration

limit of 134 mg/L average and 194 mg/L maximum will be added to the permit at outfall 001. An oil and grease limit will be added to outfall 001 as oil and grease is also categorically regulated. Flow based load limits were not included for outfall 001 because it is largely influenced by precipitation which results in large fluctuations in the volume of discharge.

FEDERAL CATEGORICAL LIMIT CALCULATIONS:
40 CFR 432 – Meat and Poultry Products Point Source Category
Subpart B – Complex Slaughterhouses

Daily LWK = 5,318,181 lbs LWK/day (slaughtered onsite)
There is no processing at this facility of hogs slaughtered off-site, therefore there is no adjustment for ELWK (slaughtered off-site)

Yearly LWK = 1,403 million lbs LWK/year

40 CFR 432 Subpart B (BAT):

Regulated Parameter	Maximum Daily (mg/L)	Maximum Monthly Avg (mg/L)
Ammonia (as N)	8.0	4.0
Total Nitrogen	194	134

40 CFR 432 Subpart B (BPT/BCT):

Regulated Parameter	Maximum Daily (mg/L)	Maximum Monthly Avg. (mg/L)
	Pounds per 1000 lbs (or g/kg) LWK	
BOD_5	0.42	0.21
Fecal Coliform	400 CFU/100 ml	
O & G	0.16	0.08
TSS	0.50	0.25

BOD_5:

$$Daily\ Max = 5{,}318{,}181\ lbs\ LWK\ x\ \frac{0.42\ lbs\ BOD}{1{,}000\ lbs\ LWK} = 2{,}233\ lbs/day$$

$$30\ Day\ Avg = 5{,}318{,}181\ lbs\ LWK\ x\ \frac{0.21\ lbs\ BOD}{1{,}000\ lbs\ LWK} = 1{,}116\ lbs/day$$

TSS:

$$Daily\ Max = 5{,}318{,}181\ lbs\ LWK\ x\ \frac{0.50\ lbs\ BOD}{1{,}000\ lbs\ LWK} = 2{,}659\ lbs/day$$

$$30\ Day\ Avg = 5{,}318{,}181\ lbs\ LWK\ x\ \frac{0.25\ lbs\ BOD}{1{,}000\ lbs\ LWK} = 1{,}329\ lbs/day$$

Oil & Grease:

$$Daily\ Max = 5{,}318{,}181\ lbs\ LWK\ x\ \frac{0.16\ lbs\ BOD}{1{,}000\ lbs\ LWK} = 851\ lbs/day$$

$$30\ Day\ Avg = 5{,}318{,}181\ lbs\ LWK\ x\ \frac{0.08 lbs\ BOD}{1{,}000\ lbs\ LWK} = 425\ lbs/day$$

Flow-Based Load Limit Calculations for Outfall 002:

Per Email from Matthew Stroub dated July 26, 2019. Out of the average 2 MGD discharged, approximately 1.7 MGD comes into contact with raw, intermediate, or finished products, 0.175 MGD is from the boiler system, 0.080 MGD is from the barns and livestock and 0.045 MGD is from sanitary wastewater. The 0.080 MGD, washwater from barns and livestock holding areas is considered process wastewater pursuant to 40 CFR 432.20. Therefore the total process wastewater on average discharged from outfall 002 is 1.78 MGD with non-process wastewater flows considered to be around 0.22 MGD on average.

Process and non-process wastewater is discharged to the on-site wastewater treatment plant. The last construction permit issued (2009-EB-2033) to the wastewater treatment plant showed that the plant is designed to treat 2.25 DAF and 3.0 DMF. Process wastewater is discharged to the treatment plant, a portion of which is partially treated and used to spray irrigate nearby agricultural land. The rest is discharged through outfall 002. Outfall 002 is designed to discharge at 2.0 DAF and 2.5 DMF as shown on Page 3 of the permit. The past five years of DMR data were reviewed and determined that the maximum monthly average reported was 1.94 MGD and maximum daily max reported was 2.42 MGD. Therefore, Outfall 002 actually discharges at or near its design flow of 2.0 MGD DAF and 2.5 MGD DMF as confirmed by the past 5 years of flow data. Flow-weighted categorical load limits will be calculated using 2.5 MGD – 0.22 MGD (non-process wastewater), which is 2.28 MGD as this is the maximum process wastewater flow that the outfall currently may discharge at, and is representative of the maximum discharge rate over the past five years.

Ammonia (as N):

$$Daily\ Max = 8.0\frac{mg}{L} x\ 8.34\ x\ 2.28\ MGD = 152\ lbs/day$$

$$30\ Day\ Avg = 4.0\frac{mg}{L} x\ x\ 8.34\ x\ 2.28\ MGD = 76\ lbs/day$$

Total Nitrogen:

$$Daily\ Max = 194\frac{mg}{L} x\ 8.34\ x\ 2.28\ MGD = 3689\ lbs/day$$

$$30\ Day\ Avg = 134\frac{mg}{L} x\ x\ 8.34\ x\ 2.28\ MGD = 2548\ lbs/day$$

DOCUMENTS NOT CITED ABOVE UTILIZED IN PERMIT REVIEW: N/A

VIII. PROPOSED SPECIAL CONDITIONS:

- ☒ FLOW REPORTING
- ☒ pH LIMIT/REPORTING
- ☒ TEMPERATURE LIMITS
- ☒ MONITORING LOCATION
- ☒ DMR SUBMISSION
- ☒ CLASS K OPERATOR
- ☒ WATER TREATMENT ADDITIVES
- ☒ STORMWATER
- ☒ RE-OPENER
- ☐ TRC
- ☒ FECAL COLIFORM
- ☒ WATER QUALITY STANDARD
- ☒ OTHER: No settleable solids, quarterly sampling submission dates, and semi-annual metals monitoring

IX. OTHER REVIEW NOTES: 316(a) – This facility does not have alternate thermal limits, therefore a thermal demonstration is not required. 316(b) There are no surface water intake structures, therefore 316(b) requirements are not applicable. No additive changes have been made since the previous permit issuance per Matthew Stroub.

MODIFICATIONS TO SPECIAL CONDITIONS: The DMR condition was updated to reflect current monitoring requirements. Special Condition 7 was updated to reflect that A01 has been removed from the permit. Special Conditions 15 and 16 were added to the permit.

X. Permit Limits Derivation – Outfall 002

Parameter – Conc. / Mass	Current Limits Avg.	Current Limits Max.	Sec. 304 Limits Avg.	Sec. 304 Limits Max.	Fed. Limits* Avg.	Fed. Limits* Max.	WQBEL Avg.	WQBEL Max.	Prop. Limits Avg.	Prop. Limits Max.	Monitoring Frequency	Notes
Flow	Special Condition								Special Condition		Daily	
pH	6.0 to 9.0		6.0 to 9.0				6.5 to 9.0		6.0 to 9.0		2/Week	
$CBOD_5$	20	40	20	40	--	--			20	40	2/Week	
	417	834	417	834	1,116	2,233			417	834		
TSS	25	50	25	50	--	--			25	50	2/Week	
	521	1,043	521	1,043	1,329	2,659			521	1,043		
Fecal Coliform	400 CFU per 100 ml		400 CFU per 100 ml		400 CFU per 100 ml				400 CFU per 100 ml		5/Week	
Oil and Grease	15	30	15	30	--	--			15	30	2/Week	
	313	626	313	626	425	851			313	626		
Total Nitrogen	134	194	--	--	134	194			134	194	2/Week	
	2,794	4,045			2,548	3,689			2,548	3,689		
Nitrate-Nitrite	Monitor Only								Monitor Only		Quarterly	
Total Phosphorus	Monitor Only								Special Condition		Quarterly	
Ammonia (as N)												
Spring/Fall	1.5	5.2			4.0	8.0	1.5	4.4	1.5	5.2	4/Week	
	31	108			76	152	31	92	31	108		
Summer	1.5	5.7			4.0	8.0	1.5	7.6	1.5	5.7	4/Week	
	31	119			76	152	31	158	31	119		
Winter	4.0	4.7			4.0	8.0	--	3.1	4.0	4.7	4/Week	
	83	98			76	152		65	83	98		
Temperature	Special Condition								Special Condition		1/Month	

All units are mg/l (concentration) and lb/day (mass).
*Attach calculations if needed. Limit is based on categorical standards unless "BPJ" is noted in comments column, indicating technology-based limit was determined based on case-by-case BAT/BCT under 40 CFR 125.3

X. PERMIT LIMITS DERIVATION – Outfall 001

Parameter	Current Limits		Sec. 304 Limits		Fed. Limits*		WQBEL		Prop. Limits		Monitoring Frequency	Notes
	Avg.	Max.	Avg.	Max.	Avg.	Max.	Avg.	Max.	Avg.	Max.		
Flow	Special Condition								Special Condition		1/Week	
pH	6 to 9		6 to 9				6.5 to 9		6 to 9		1/Week	
$CBOD_5$	10	20	10	20	-- 1,116	-- 2,233			10 1,116	20 2,233	1/Week	
TSS	12	24	12	24	-- 1,329	-- 2,659			12 1,329	24 2,659	1/Week	
Oil and Grease	15	30	15	30	-- 425	-- 851			15 425	30 851	1/Week	
Fecal Coliform	400 CFU per 100 ml		400 CFU per 100 ml		400 CFU per 100 ml				400 CFU per 100 ml		1/Week	
Total Nitrogen	Monitor Only				134	194			134	194	1/Week	
Nitrate-Nitrite	Monitor Only								Monitor Only		Quarterly	
Total Phosphorus	Monitor Only								Monitor Only		Quarterly	
Ammonia (as N) Spring/Fall	1.8	6.9			4.0	8.0	2.0	8.4	2.0	8.4	1/Week	
Summer	1.5	9.4			4.0	8.0	1.6	10.1	1.6	10.1		
Winter	4.0	6.1			4.0	8.0	4.0	5.8	4.0	5.8		

All units are mg/l (concentration) and lb/day (mass).
*Attach calculations if needed. Limit is based on categorical standards unless "BPJ" is noted in comments column, indicating technology-based limit was determined based on case-by-case BAT/BCT under 40 CFR 125.3

XI. TREATMENT TYPES
(CHECK ALL THAT APPLY)

Physical/Chemical Treatment

- ☐ 1A Ammonia Stripping
- ☐ 2A Carbon Absorption
- ☐ 2N Chemical Hydrolysis
- ☐ 2B Chemical Oxidation
- ☐ 2C Chemical Precipitation
- ☐ 2D Coagulation
- ☐ 2E Dechlorination
- ☐ 2F Disinfection (Chlorine)
- ☐ 2G Disinfection (Ozone)
- ☒ 4I Disinfection (Ultraviolet)
- ☐ 2H Disinfection (Other)
- ☐ 1D Distillation
- ☐ 2I Electrochemical Treatment
- ☐ 1E Electrodialysis
- ☐ 1F Evaporation
- ☐ 1G Flocculation
- ☐ 1I Foam Fractionation
- ☐ 1J Freezing
- ☐ 1K Gas Phase Separation
- ☐ 2J Ion Exchange
- ☐ 1O Mixing
- ☐ 2K Neutralization
- ☐ 2L Reduction
- ☐ 1W Solvent Extraction
- ☐ 1X Sorption

Biological Treatment

- ☒ 3A Activated Sludge
- ☐ 3B Aerated Lagoons
- ☒ 3C Anaerobic Treatment
- ☐ 3K Biological Hydrolysis
- ☐ 8F Contact Stabilization
- ☐ 8G Extended Aeration
- ☐ 8D Lagoon(s)
- ☐ 3P 1 Cell Lagoon
- ☐ 3Q 2 Cell Lagoon
- ☐ 3R 3 Cell Lagoon
- ☐ 3S 4 Cell Lagoon
- ☒ 3D Nitrification – Denitrification
- ☐ 8E Oxidation Pond or Ditch
- ☐ 3J Polishing Lagoons
- ☐ 6I Rock Filter
- ☐ 3I Rotating Biological Contractors
- ☐ 8B Secondary Treatment
- ☒ 3F Spray Irrigation/Land Application
- ☐ 3G Stabilization Ponds
- ☐ 8C Tertiary Treatment
- ☐ 3M Treatment by Plain Aeration
- ☐ 3H Trickling Filtration
- ☐ 6L Two Stage Activated Sludge
- ☐ 6M Vegetative Filter

Discharge Type

- ☐ 8H Constructed Wetland
- ☒ 4A Discharge to Surface Water
- ☐ 4B Ocean Discharge
- ☐ 4C Reuse/Recycle-Treated Effluent
- ☐ 4E Reuse/Sale of Wastewater
- ☐ 6J Subsurface Seepage
- ☐ 4D Underground Injection

Sludge Management

- ☐ 5A Aerobic Digestion
- ☐ 5B Anaerobic Digestion
- ☐ 5C Belt Filtration
- ☐ 5D Centrifugation
- ☐ 5E Chemical Conditioning
- ☐ 5F Chlorine Treatment
- ☐ 5G Composting
- ☐ 5H Drying Beds
- ☐ 5I Elutriation
- ☐ 5J Flotation Thickening
- ☐ 5K Freezing (Sludge Treatment)
- ☐ 5L Gravity Thickening
- ☐ 5M Heat Drying
- ☐ 5N Heat Treatment
- ☐ 5O Incineration
- ☐ 5P Land Application (Sludge)
- ☐ 5Q Landfill
- ☐ 6E Lime Stabilization
- ☐ 5R Pressure Filtration
- ☐ 5S Pyrolysis
- ☐ 5T Sludge Lagoons
- ☐ 6K Thermophilic Digestion
- ☐ 5U Vacuum Filtration
- ☐ 5V Vibration
- ☐ 5W Wet Air Oxidation

Preliminary, Primary, Filtration, Other Treatment

- ☐ 1C Diatomaceous Earth Filtration
- ☐ 1Y Equalization
- ☐ 6A Excess Flow Treatment
- ☐ 1H Flotation
- ☒ 4H Grease Removal
- ☐ 1L Grinding (Comminutors)
- ☐ 1M Grit Removal
- ☐ 3N Holding/Detention Pond
- ☐ 6B Imhoff Tank
- ☐ 1Z Intermittent Sand Filters
- ☐ 6C Irradiation/Beta Ray
- ☐ 6D Irradiation/Gamma Ray
- ☐ 1N Microstraining (Microscreening)
- ☐ 1P Moving Bed Filters
- ☐ 1Q Multimedia Filtration
- ☐ 2M Odor Control
- ☐ 6F Oil-Water Separator
- ☐ 6G Pasteurization
- ☐ 6H Phosphorus Removal
- ☐ 3L Post Aeration
- ☐ 3E Pre-Aeration
- ☐ 8A Primary Treatment
- ☐ 1R Rapid Sand Filtration
- ☐ 1S Reverse Osmosis
- ☐ 1T Screening
- ☒ 1U Sedimentation
- ☐ 1V Slow Sand Filtration
- ☐ 4F Temperature Control

Please print or type in the unshaded areas only.

Form Approved. OMB No. 2040-0086.

FORM 1 GENERAL

U.S. ENVIRONMENTAL PROTECTION AGENCY
GENERAL INFORMATION
Consolidated Permits Program
(Read the "General Instructions" before starting.)

I. EPA I.D. NUMBER: F 0170155001 — T/A: D

LABEL ITEMS	
I. EPA I.D. NUMBER	PLEASE PLACE LABEL IN THIS SPACE
III. FACILITY NAME	
V. FACILITY MAILING ADDRESS	
VI. FACILITY LOCATION	

GENERAL INSTRUCTIONS

If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent *(the area to the left of the label space lists the information that should appear)*, please provide it in the proper fill-in area(s) below. If the label is complete and correct, you need not complete Items I, III, V, and VI *(except VI-B which must be completed regardless)*. Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.

II. POLLUTANT CHARACTERISTICS

INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of **bold-faced terms.**

SPECIFIC QUESTIONS	Mark "X" YES	NO	FORM ATTACHED
A. Is this facility a **publicly owned treatment works** which results in a **discharge** to **waters of the U.S.?** (FORM 2A)		X	
B. Does or will this facility *(either existing or proposed)* include a **concentrated animal feeding operation** or **aquatic animal production facility** which results in a **discharge to waters of the U.S.?** (FORM 2B)		X	
C. Is this a facility which currently results in **discharges** to **waters of the U.S.** other than those described in A or B above? (FORM 2C)	X		
D. Is this a proposed facility *(other than those described in A or B above)* which will result in a **discharge to waters of the U.S.?** (FORM 2D)		X	
E. Does or will this facility treat, store, or dispose of **hazardous wastes?** (FORM 3)		X	
F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)		X	
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)		X	
H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)		X	
I. Is this facility a proposed **stationary source** which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		X	
J. Is this facility a proposed **stationary source** which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an **attainment area?** (FORM 5)		X	

III. NAME OF FACILITY

1 SKIP: JBS USA Food Company

IV. FACILITY CONTACT

A. NAME & TITLE *(last, first, & title)*	B. PHONE *(area code & no.)*
2 Stroub, Matthew Environmental manager	(217) 323-6303

V. FACILITY MAILING ADDRESS

A. STREET OR P.O. BOX: 3 8295 Arenzille road

B. CITY OR TOWN	C. STATE	D. ZIP CODE
4 Beardstown	IL	62618

VI. FACILITY LOCATION

A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER: 5 8295 Arenzville road

RECEIVED
MAR 13 2018
IEPA
BOW/WPC/PERMIT SECTION

B. COUNTY NAME: Cass

C. CITY OR TOWN	D. STATE	E. ZIP CODE	F. COUNTY CODE *(if known)*
6 Beardstown	Il	62618	

CONTINUE ON REVERSE

CONTINUED FROM THE FRONT

VII. SIC CODES *(4-digit, in order of priority)*

A. FIRST	B. SECOND
7 2011 *(specify)* Meat Packing Plant - Pork	7 *(specify)*
C. THIRD	**D. FOURTH**
7 *(specify)*	7 *(specify)*

VIII. OPERATOR INFORMATION

A. NAME: 8 JBS USA Food Company

B. Is the name listed in Item VIII-A also the owner? ☑ YES ☐ NO

C. STATUS OF OPERATOR *(Enter the appropriate letter into the answer box: if "Other," specify.)*

F = FEDERAL; S = STATE; P = PRIVATE; M = PUBLIC *(other than federal or state)*; O = OTHER *(specify)*

M *(specify)*

D. PHONE *(area code & no.)*: A (970) 506-8000

E. STREET OR P.O. BOX: 1770 Promontory Circle

F. CITY OR TOWN: B Greeley

G. STATE: CO

H. ZIP CODE: 80634

IX. INDIAN LAND

Is the facility located on Indian lands? ☐ YES ☑ NO

X. EXISTING ENVIRONMENTAL PERMITS

A. NPDES *(Discharges to Surface Water)*	D. PSD *(Air Emissions from Proposed Sources)*
9 N IL0023914	9 P 017015AAL
B. UIC *(Underground Injection of Fluids)*	**E. OTHER** *(specify)*
9 U	9 2015SC60531 — *(specify)* Land Application of Waste Activated Sludge
C. RCRA *(Hazardous Wastes)*	**E. OTHER** *(specify)*
9 R	9 2014SC58299 — *(specify)* SPRAY IRRIGATION PERMIT

XI. MAP

Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers, and other surface water bodies in the map area. See instructions for precise requirements.

XII. NATURE OF BUSINESS *(provide a brief description)*

JBS USA Food Company in Beardstown, Illinois is a pork processing facility. Approximately 20,000 hogs are processed per day, 5-6 days per week.

From this harvest, fresh pork products, pork trimmings, organs, dried blood, blood by products, edible and inedible rendering products are produced for sale.

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AUG 21 2019
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EPA, REGION 5

RECEIVED
MAR 13 2018
IEPA
BOW/WPC/PERMIT SECTION

XIII. CERTIFICATION *(see instructions)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME & OFFICIAL TITLE *(type or print)*	B. SIGNATURE	C. DATE SIGNED
Jonathan Hopkins, General Manager	Jonathan Hopkins	3-12-18

COMMENTS FOR OFFICIAL USE ONLY

C

Please print or type in the unshaded areas only.

EPA I.D. NUMBER (*copy from Item 1 of Form 1*): 0170155001

Form Approved.
OMB No. 2040-0086.
Approval expires 3-31-98.

FORM **2C** NPDES

U.S. ENVIRONMENTAL PROTECTION AGENCY
APPLICATION FOR PERMIT TO DISCHARGE WASTEWATER
EXISTING MANUFACTURING, COMMERCIAL, MINING AND SILVICULTURE OPERATIONS
Consolidated Permits Program

I. OUTFALL LOCATION

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

A. OUTFALL NUMBER (*list*)	B. LATITUDE			C. LONGITUDE			D. RECEIVING WATER (*name*)
	1. DEG.	2. MIN.	3. SEC.	1. DEG.	2. MIN.	3. SEC.	
A01	39.00	59.00	26.00	90.00	24.00	40.00	Illinois River & unnamed tributary
001	39.00	59.00	55.00	90.00	25.00	0.00	Illinois River & unnamed tributary
002	40.00	0.00	48.00	90.00	26.00	46.00	Illinois River & unnamed tributary

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined (*e.g., for certain mining activities*), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

B. For each outfall, provide a description of: (1) All operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) The average flow contributed by each operation; and (3) The treatment received by the wastewater. Continue on additional sheets if necessary.

1. OUTFALL NO. (*list*)	2. OPERATION(S) CONTRIBUTING FLOW		3. TREATMENT		
	a. OPERATION (*list*)	b. AVERAGE FLOW (*include units*)	a. DESCRIPTION	b. LIST CODES FROM TABLE 2C-1	
				3-a	3-b
002	Livestock wastewater	250,000 gal/day	Biolac system		
	Process water	1,750,000 gal/day	Biolac system	3-a	3-b
001	Storm water and farm land discharge	2,000 gal/day	Storm water and farm runoff		
A01	Storm water runoff	2,000 gal/day	Storm water		

OFFICIAL USE ONLY (*effluent guidelines sub-categories*)

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MAR 13 2018
IEPA
BOW/WPC/PERMIT SECTION

CONTINUE ON REVERSE

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NPDES Permit No. IL0023914
Notice No. 19072601.docx

Public Notice Beginning Date:

Public Notice Ending Date:

National Pollutant Discharge Elimination System (NPDES)
Permit Program

Draft Reissued NPDES Permit to Discharge into Waters of the State

Public Notice/Fact Sheet Issued By:

Illinois Environmental Protection Agency
Bureau of Water
Division of Water Pollution Control
Permit Section
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276
217/782-0610

Name and Address of Permittee:

JBS Swift Pork Company
8295 Arenzville Road
Beardstown, Illinois 62618

Name and Address of Facility:

JBS Swift Pork Company
8295 Arenzville Road
Beardstown, Illinois 62618
(Cass County)

The Illinois Environmental Protection Agency (IEPA) has made a tentative determination to issue a NPDES permit to discharge into the waters of the state and has prepared a draft permit and associated fact sheet for the above named Permittee. The Public Notice period will begin and end on the dates indicated in the heading of this Public Notice/Fact Sheet. The last day comments will be received will be on the Public Notice period ending date unless a commentor demonstrating the need for additional time requests an extension to this comment period and the request is granted by the IEPA. Interested persons are invited to submit written comments on the draft permit to the IEPA at the above address. Commentors shall provide his or her name and address and the nature of the issues proposed to be raised and the evidence proposed to be presented with regards to those issues. Commentors may include a request for public hearing. Persons submitting comments and/or requests for public hearing shall also send a copy of such comments or requests to the permit applicant. The NPDES permit and notice number(s) must appear on each comment page.

The application, engineer's review notes including load limit calculations, Public Notice/Fact Sheet, draft permit, comments received, and other documents are available for inspection and may be copied at the IEPA between 9:30 a.m. and 3:30 p.m. Monday through Friday when scheduled by the interested person.

If written comments or requests indicate a significant degree of public interest in the draft permit, the permitting authority may, at its discretion, hold a public hearing. Public notice will be given 45 days before any public hearing. Response to comments will be provided when the final permit is issued. For further information, please call Jenny Larsen at 217/782-0610.

The applicant is engaged in pork processing operations including animal holding, slaughtering, eviscending, trimming, cutting, blood rendering, and by-products recovery (SIC 2011). Process wastewater is generated in the production of fresh pork products, pork trimmings, organs, dried blood, blood by-products, and edible and inedible rendering products. Plant operation results in an estimated average discharge of 0.006 MGD of stormwater and spray irrigation run-off from outfall 001 and an average discharge of 2.0 MGD, 2.5 MGD maximum of wastewater treatment effluent and stormwater runoff from outfall 002.

Process wastewaters are treated in the on-site wastewater treatment plant consisting of screening, grease removal, a 19 million gallon anaerobic lagoon, an activated sludge system, a 2.0 million gallon anoxic basin with carbon source addition for denitrification, multiple clarifiers, and ultraviolet disinfection prior to discharging via Outfall 002. A portion of the wastewater is diverted after the anaerobic lagoon to two holding ponds prior to being used for spray irrigation on nearby fields. Sludge is stored on-site in a sludge holding basin prior to being composted or land applied to agricultural fields.

The following modifications are proposed:

Outfall A01 was removed from the permit as non-contact cooling water is now directed to the wastewater treatment plant tributary to Outfall 002. Temperature limits were added to Outfall 002 based on this change. The contributory wastestream names were updated to reflect this change. Special Condition 7 was updated to reflect this change.

Total nitrogen (as N) and oil and grease limits were added to Outfall 001 as the spray irrigation wastewater is regulated by 40 CFR 432.

Production based categorical load limits for total suspended solids, $CBOD_5$, and oil and grease were added to Outfall 001 as the spray irrigation wastewater is regulated by 40 CFR 432.

Flow-based categorical load limits were updated for Total Nitrogen (as N) at Outfall 002 to exclude non-process wastewater flows directed to the wastewater treatment plant that are not regulated by 40 CFR 432.

Total Phosphorus and Nitrate-Nitrite sampling frequency was increased from quarterly to once per month to ensure that the facility meets the Agency's future nutrient goals.

Special Condition 15 was added to the permit which requires the permittee to prepare and submit a feasibility study that identifies the method, timeframe, and costs of reducing phosphorus and total nitrogen levels at Outfall 002 to a level consistently meeting potential future effluent limits.

Special Condition 16 was added to the permit which requires the permittee to develop and submit a phosphorus and total nitrogen discharge optimization plan.

Ammonia limits have been updated to reflect the water quality based effluent limits found at Title 35 Ill. Adm. Code § 302.212.

Application is made for the existing discharge(s) which are located in Cass County, Illinois. The following information identifies the discharge point, receiving stream and stream classifications:

Outfall	Receiving Stream	Latitude	Longitude	Stream Classification	Integrity Rating
001	Unnamed tributary to the Illinois River Illinois River via Beardstown STP effluent channel	40° 00′ 50″ North	90° 26′ 40″ West	General Use	Not Rated
002		40° 00′ 48″ North	90° 26′ 46″ West	General Use	Not Rated

To assist you further in identifying the location of the discharge please see the attached map.

The unnamed tributary to the Illinois River receiving the discharges from outfall 001, tributary to Water Body Segment D-31, is not on the draft 2016 Illinois Integrated Water Quality Report and Section 303 (d) list of impaired waters since it has not been assessed and is not a biologically significant stream on the 2008 Illinois Department of Natural Resources Publication – *Integrating Multiple Taxa in a Biological Stream Rating System.*

The Illinois River, Water Body Segment D-31, receiving the discharge from outfall 002 is on the draft 2016 Illinois Integrated Water Quality Report and Section 303(d) list of impaired waters and is not a biologically significant stream on the 2008 Illinois Department of Natural Resources Publication – *Integrating Multiple Taxa in a Biological Stream Rating System.*

The following parameters have been identified as the pollutants causing impairment:

Designated Uses	Pollutants Causing Impairments
Fish Consumption	Mercury, Polychlorinated biphenyls
Primary Contact	Fecal Coliform

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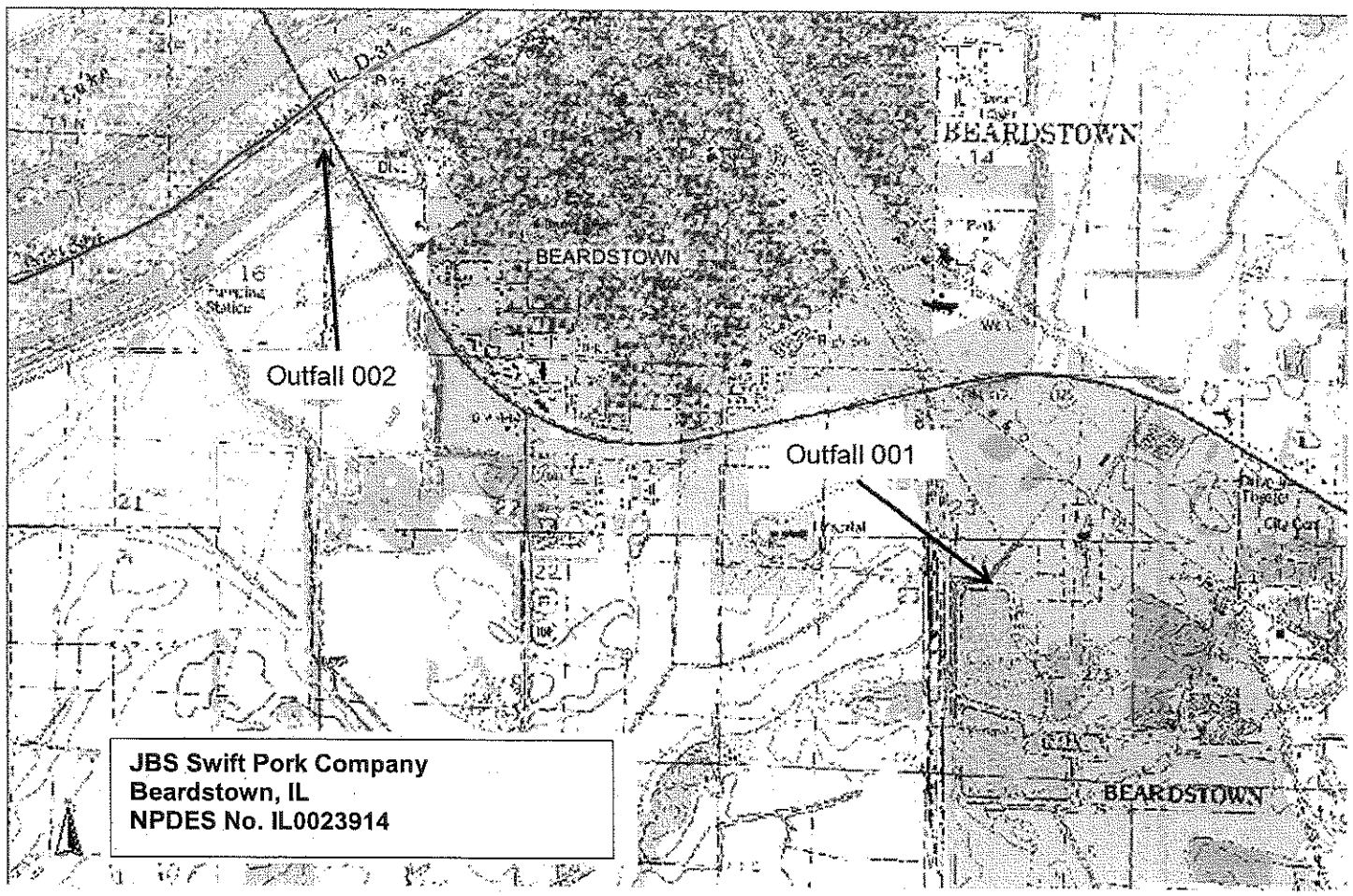
BEARDSTOWN
BEARDSTOWN
BEARDSTOWN
Outfall 002
Outfall 001
JBS Swift Pork Company
Beardstown, IL
NPDES No. IL0023914

The discharge(s) from the facility shall be monitored and limited at all times as follows:

PARAMETER	LOAD LIMITS lbs/day DAF (DMF) 30 DAY AVERAGE	DAILY MAXIMUM	REGULATION	CONCENTRATION LIMITS mg/L 30 DAY AVERAGE	DAILY MAXIMUM	REGULATION
Outfall 001:						
Flow						
pH				Shall be within the range 6-9 s.u.		35 IAC 304.125
$CBOD_5$	1,116	2,233	40 CFR 432	10	20	35 IAC 304.120(c)
Total Suspended Solids	1,329	2,659	40 CFR 432	12	24	35 IAC 304.120(c)
Oil and Grease	425	851	40 CFR 432	15	30	34 IAC 304.124
Fecal Coliform				400cfu/100 ml		35 IAC 304.121
Total Phosphorus (as P)				Monitor Only		35 IAC 309.146
Total Nitrogen (as N)				134	194	40 CFR 432.23
Nitrate-Nitrite (as N)				Monitor Only		35 IAC 309.146
Ammonia Nitrogen (as N)	30-Day Avg. / Weekly Avg. / Daily Max			30-Day Avg. / Weekly Avg. / Daily Max		
Spring/Fall*				2.0 / 5.1 / 8.4		35 IAC 302.212 & 35 IAC 355
Summer**				1.6 / 3.9 / 10.1		35 IAC 302.212 & 35 IAC 355
Winter***				4.0 / 5.8		35 IAC 302.212 & 35 IAC 355

*Spring/Fall consists of the following months: Mar.-May & Sept.-Oct.
**Summer consists of the following months: June – August
***Winter consists of the following months: November-February

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PARAMETER	LOAD LIMITS lbs/day DAF (DMF) 30 DAY AVERAGE	DAILY MAXIMUM	REGULATION	CONCENTRATION LIMITS mg/L 30 DAY AVERAGE	DAILY MAXIMUM	REGULATION
Outfall 002:						
Flow						35 IAC 309.146
pH				Shall be within the range 6-9 s.u.		35 IAC 304.125 & 40 CFR 432
$CBOD_5$	417	834	35 IAC 304.120(b)	20	40	35 IAC 304.120(b)
Total Suspended Solids	521	1,043	35 IAC 304.120(b)	25	50	35 IAC 304.120(b)
Oil & Grease	313	626	35 IAC 304.124	15	30	35 IAC 304.124
Fecal Coliform					400cfu/100 ml	35 IAC 304.121 & 40 CFR 432
Total Nitrogen (as N)	2,548	3,698	40 CFR 432	134	194	40 CFR 432
Nitrate-Nitrite (as N)				Monitor Only		35 IAC 309.146
Total Phosphorus (as P)				Monitor Only		35 IAC 309.146
Ammonia Nitrogen (as N)	30-Day Avg. / Weekly Avg. / Daily Max			30-Day Avg. / Weekly Avg. / Daily Max		
Spring/Fall*	31	79	92	35 IAC 302.212 & 35 IAC 355	1.5 / 3.8 / 4.4	35 IAC 302.212 & 35 IAC 355
Summer**	31	79	159	35 IAC 302.212 & 35 IAC 355	1.5 / 3.8 / 7.6	35 IAC 302.212 & 35 IAC 355
Winter***	-	-	65	35 IAC 302.212 & 35 IAC 355	- / - / 3.1	35 IAC 302.212 & 35 IAC 355

*Spring/Fall consists of the following months: Mar.-May & Sept.-Oct.
**Summer consists of the following months: June – August
***Winter consists of the following months: November-February

Load Limit Calculations:

A. Load limit calculations for outfall 002 for the following pollutant parameters were based on a maximum flow of 2.5 MGD and using the formula of flow (MGD) X concentration limit (mg/l) X 8.34 = the average or maximum load limit (lbs/day): $CBOD_5$, TSS, Oil and Grease, and Ammonia Nitrogen (as N)

B. Load limits calculations for outfall 002 for Total Nitrogen (as N) were based on a maximum production flow of 2.28 MGD and using the formula of flow (MGD) x concentration limit (mg/l) x 8.34 = the average or maximum load limit (lbs/day)

C. Production based load limits were calculated by multiplying the average production by the effluent limit contained in 40 CFR 432. Production figures utilized in these calculations for the following subcategories are as follows:

Subcategory	Production Rate
Complex Slaughterhouse	5,318,181 pounds per day, 1,404 million pounds per year

BOD_5, TSS, and Oil and Grease were limited using Federal production based load limits. The following sample calculation shows the methodology utilized to determine production based load limitations:

TSS avg = 5,318,181 lbs LWK x (0.25 lbs TSS/1,000 lbs LWK) = 1,329 lbs TSS/day
TSS max = 5,318,181 lbs LWK x (0.5 lbs TSS/1,000 lbs LWK) = 2,659 lbs TSS/day

The load limits appearing in the permit will be the more stringent of the State and Federal Guidelines.

The following explain the conditions of the proposed permit:

The special conditions of the permit serve the purpose of clarifying monitoring requirements, monitoring location, DMR submission, temperature, pH, and fecal coliform limitations, operator certification requirements, additional monitoring requirements for Outfall 001, and Storm Water Pollution Prevention Plan (SWPPP) requirements.

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NPDES Permit No. IL0023914

Illinois Environmental Protection Agency

Division of Water Pollution Control

1021 North Grand Avenue East

Post Office Box 19276

Springfield, Illinois 62794-9276

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Reissued (NPDES) Permit

Expiration Date:

Issue Date:
Effective Date:

Name and Address of Permittee:

JBS Swift Pork Company
8295 Arenzville Road
Beardstown, Illinois 62618

Facility Name and Address:

JBS Swift Pork Company
8295 Arenzville Road
Beardstown, Illinois 62618
(Cass County)

Discharge Number and Name:

Outfall 001 – Stormwater Runoff and Spray Irrigation Runoff

Outfall 002 – Treated Wastewater and Stormwater

Receiving Waters:

Unnamed tributary to the Illinois River

Illinois River via the Village of Beardstown STP Effluent Channel

In compliance with the provisions of the Illinois Environmental Protection Act, Title 35 of Ill. Adm. Code, Subtitle C and/or Subtitle D, Chapter 1, and the Clean Water Act (CWA), the above-named permittee is hereby authorized to discharge at the above location to the above-named receiving stream in accordance with the standard conditions and attachments herein.

Permittee is not authorized to discharge after the above expiration date. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit the proper application as required by the Illinois Environmental Protection Agency (IEPA) not later than 180 days prior to the expiration date.

Darin E. LeCrone, P.E.
Manager, Industrial Unit, Permit Section
Division of Water Pollution Control

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NPDES Permit No. IL0023914

Effluent Limitations and Monitoring

1. From the effective date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

PARAMETER	LOAD LIMITS lbs/day DAF (DMF) 30 DAY AVERAGE	LOAD LIMITS lbs/day DAF (DMF) DAILY MAXIMUM	CONCENTRATION LIMITS mg/L 30 DAY AVERAGE	CONCENTRATION LIMITS mg/L DAILY MAXIMUM	SAMPLE FREQUENCY	SAMPLE TYPE
Outfall 001 – Stormwater Runoff and Spray Irrigation Runoff (DAF = 0.006 MGD)						
Flow	See Special Condition 1				1/Week	Total
pH	See Special Condition 2				1/Week	Grab
$CBOD_5$	1,116	2,233	10	20	1/Week	Grab
Total Suspended Solids	1,329	2,659	12	24	1/Week	Grab
Oil and Grease	425	851	15	30	1/Week	Grab
Fecal Coliform	See Special Condition 12				1/Week	Grab
Total Phosphorus (as P)				Monitor Only	Quarterly*	Grab
Total Nitrogen (as N)			134	194	1/Week	Grab
Nitrate-Nitrite (as N)				Monitor Only	Quarterly*	Grab
Ammonia Nitrogen (as N)			30-Day Avg.	Weekly Avg. / Daily Max		
Spring/Fall**			2.0	5.1 / 8.4	1/Week	Grab
Summer***			1.6	3.9 / 10.1	1/Week	Grab
Winter****			4.0	5.8	1/Week	Grab

*See Special Condition 10.
** Spring/Fall consists of March – May and September – October
*** Summer consists of June – August
**** Winter consists of November – February

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NPDES Permit No. IL0023914

Effluent Limitations and Monitoring

1. From the effective date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

PARAMETER	LOAD LIMITS lbs/day DAF (DMF) 30 DAY AVERAGE	LOAD LIMITS lbs/day DAF (DMF) DAILY MAXIMUM	CONCENTRATION LIMITS mg/L 30 DAY AVERAGE	CONCENTRATION LIMITS mg/L DAILY MAXIMUM	SAMPLE FREQUENCY	SAMPLE TYPE
Outfall 002 - Treated Wastewater and Stormwater Runoff (DAF = 2.0 MGD; DMF = 2.5 MGD)						
Flow	See Special Condition 1				Daily RIT	Measurement
pH	See Special Condition 2				2/Week	Grab
$CBOD_5$	417	834	20	40	2/Week	24-Hr Composite
Total Suspended Solids	521	1,043	25	50	2/Week	24-Hr Composite
Oil & Grease	313	626	15	30	2/Week	Grab
Fecal Coliform	See Special Condition 12				5/Week	Grab
Total Nitrogen (as N)	2,548	3,689	134	194	2/Week	24-Hr Composite
Nitrate-Nitrite (as N)				Monitor Only	1/Month	24-Hr Composite
Total Phosphorus (as P)				Monitor Only	1/Month	24-Hr Composite
Ammonia Nitrogen (as N)	30-Day Avg.	Weekly Avg. / Daily Max	30-Day Avg.	Weekly Avg. / Daily Max		
Spring/Fall*	31	79 / 92	1.5	3.8 / 4.4	4/Week	24-Hr Composite
Summer**	31	79 / 159	1.5	3.8 / 7.6	4/Week	24-Hr Composite
Winter***	-	- / 65	-	- / 3.1	4/Week	24-Hr Composite
Temperature	See Special Condition 3				2/Week	Grab

* Spring/Fall consists of March – May and September – October
** Summer consists of June – August
*** Winter consists of November – February

NPDES Permit No. IL0023914

Special Conditions

SPECIAL CONDITION 1. Flow shall be measured in units of Million Gallons per Day (MGD) and reported as a monthly average and a daily maximum on the Discharge Monitoring Report.

SPECIAL CONDITION 2. The pH shall be in the range 6.0 to 9.0. The monthly minimum and monthly maximum values shall be reported on the DMR form.

SPECIAL CONDITION 3. This facility is not allowed any mixing with the receiving stream in order to meet applicable water quality thermal limitations. Therefore, discharge of wastewater from this facility must meet the following thermal limitations prior to discharge into the receiving stream.

A. The discharge must not exceed the maximum limits in the following table during more than one percent of the hours in the 12 month period ending with any month. Moreover, at no time shall the water temperature of the discharge exceed the maximum limits in the following table by more the 1.7° C (3° F).

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
°F	60	60	60	90	90	90	90	90	90	90	90	60
°C	16	16	16	32	32	32	32	32	32	32	32	16

B. In addition, the discharge shall not cause abnormal temperature changes that may adversely affect aquatic life unless caused by natural conditions.

C. The discharge shall not cause the maximum temperature rise above natural temperatures to exceed 2.8° C (5° F).

D. The monthly maximum value shall be reported on the DMR form.

SPECIAL CONDITION 4. Samples taken in compliance with the effluent monitoring requirements for outfall 001 shall be taken at a point representative of the discharge, but prior to entry into the receiving stream; samples may be collected approximately 200 yards upstream from the outfall 001 location. Samples taken in compliance with the effluent monitoring requirements for outfall 002 shall be taken at the point of discharge from the treatment system.

SPECIAL CONDITION 5. The Permittee shall record monitoring results on Discharge Monitoring Report (DMR) electronic forms using one such form for each outfall each month.

In the event that an outfall does not discharge during a monthly reporting period, the DMR Form shall be submitted with no discharge indicated.

The Permittee is required to submit electronic DMRs (NetDMRs) instead of mailing paper DMRs to the IEPA unless a waiver has been granted by the Agency. More information, including registration information for the NetDMR program, can be obtained on the IEPA website, https://www2.illinois.gov/epa/topics/water-quality/surface-water/netdmr/Pages/quick-answer-guide.aspx.

The completed Discharge Monitoring Report forms shall be submitted to IEPA no later than the 25th day of the following month, unless otherwise specified by the permitting authority.

Permittees that have been granted a waiver shall mail Discharge Monitoring Reports with an original signature to the IEPA at the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Attention: Compliance Assurance Section, Mail Code # 19
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

SPECIAL CONDITION 6. If an applicable effluent standard or limitation is promulgated under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the Clean Water Act and that effluent standard or limitation is more stringent than any effluent limitation in the permit or controls a pollutant not limited in the NPDES Permit, the Agency shall revise or modify the permit in accordance with the more stringent standard or prohibition and shall so notify the permittee.

SPECIAL CONDITION 7. In the event the permittee shall require the use of water treatment additives other than those previously

approved by this Agency, or if the permittee increases the feed rate or quantity of the additives used beyond what has previously been approved by this Agency, the permittee shall request a modification of this permit in accordance with the Standard Conditions – Attachment H.

SPECIAL CONDITION 8. No effluent shall contain settleable solids, floating debris, visible oil, grease, scum or sludge solids. Color, odor and turbidity must be reduced to below obvious levels.

SPECIAL CONDITION 9. The effluent, alone or in combination with other sources, shall not cause a violation of any applicable water quality standard outlined in 35 Ill. Adm. Code 302.

SPECIAL CONDITION 10. Quarterly sampling results shall be submitted to the IEPA with the March, June, September, and December DMRs each year, unless otherwise specified by the IEPA.

SPECIAL CONDITION 11. The use or operation of this facility shall be by or under the supervision of a Certified Class K operator.

SPECIAL CONDITION 12. The daily maximum fecal coliform count shall not exceed 400 per 100 mL.

SPECIAL CONDITION 13. The Permittee shall conduct semi-annual monitoring of the effluent at Outfall 002 and report concentrations (in mg/L) of the following listed parameters. Monitoring shall begin three (3) months from the effective date of this permit. The sample shall be a 24-hour effluent composite except as otherwise specifically provided below and the results shall be submitted on Discharge Monitoring Report Forms to IEPA unless otherwise specified by the IEPA. The parameters to be sampled and the minimum reporting limits to be attained are as follows:

STORET CODE	PARAMETER	Minimum reporting limit
01002	Arsenic	0.05 mg/L
01007	Barium	0.5 mg/L
01027	Cadmium	0.001 mg/L
01032	Chromium (hexavalent) (grab)	0.01 mg/L
01034	Chromium (total)	0.05 mg/L
01042	Copper	0.005 mg/L
00720	Cyanide (total) (grab)***	5.0 µg/L
00722	Cyanide (grab) (available**** or amenable to chlorination)***	5.0 µg/L
00951	Fluoride	0.1 mg/L
01045	Iron (total)	0.5 mg/L
01046	Iron (Dissolved)	0.5 mg/L
01051	Lead	0.05 mg/L
01055	Manganese	0.5 mg/L
71900	Mercury (grab)**	1.0 ng/L*
01067	Nickel	0.005 mg/L
00556	Oil (hexane soluble or equivalent) (Grab Sample only)	5.0 mg/L
32730	Phenols (grab)	0.005 mg/L
01147	Selenium	0.005 mg/L
01077	Silver (total)	0.003 mg/L
01092	Zinc	0.025 mg/L

Minimum Reporting Limits are defined as – (1) The minimum value below which data are documented as non-detects. (2) Three to ten times the method detection limit. (3) The minimum value of the calibration range.

All sample containers, preservative, holding times, analyses, method detection limit determinations and quality assurance/quality control requirements shall be in accordance with 40 CFR 136.

Unless otherwise indicated, concentrations refer to the total amount of the constituent present in all phases, whether solid, suspended or dissolved, elemental or combined, including all oxidation states.

*1.0 ng/L = 1 part per trillion.
**Utilize USEPA Method 1631E and the digestion procedure described in Section 11.1.1.2 of 1631E.
***Analysis for cyanide (available or amenable to chlorination) is only required if cyanide (total) is detected at or above the minimum reporting limit.
****USEPA Method OIA-1677.

NPDES Permit No. IL0023914

Special Conditions

SPECIAL CONDITION 14. STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

A. A storm water pollution prevention plan shall be maintained by the permittee for the storm water associated with industrial activity at this facility. The plan shall identify potential sources of pollution which may be expected to affect the quality of storm water discharges associated with the industrial activity at the facility. In addition, the plan shall describe and ensure the implementation of practices which are to be used to reduce the pollutants in storm water discharges associated with industrial activity at the facility and to assure compliance with the terms and conditions of this permit. The permittee shall modify the plan if substantive changes are made or occur affecting compliance with this condition.

1. Waters not classified as impaired pursuant to Section 303(d) of the Clean Water Act.

   Unless otherwise specified by federal regulation, the storm water pollution prevention plan shall be designed for a storm event equal to or greater than a 25-year 24-hour rainfall event.

2. Waters classified as impaired pursuant to Section 303(d) of the Clean Water Act

   For any site which discharges directly to an impaired water identified in the Agency's 303(d) listing, and if any parameter in the subject discharge has been identified as the cause of impairment, the storm water pollution prevention plan shall be designed for a storm event equal to or greater than a 25-year 24-hour rainfall event. If required by federal regulations, the storm water pollution prevention plan shall adhere to a more restrictive design criteria.

B. The operator or owner of the facility shall make a copy of the plan available to the Agency at any reasonable time upon request.

   Facilities which discharge to a municipal separate storm sewer system shall also make a copy available to the operator of the municipal system at any reasonable time upon request.

C. The permittee may be notified by the Agency at any time that the plan does not meet the requirements of this condition. After such notification, the permittee shall make changes to the plan and shall submit a written certification that the requested changes have been made. Unless otherwise provided, the permittee shall have 30 days after such notification to make the changes.

D. The discharger shall amend the plan whenever there is a change in construction, operation, or maintenance which may affect the discharge of significant quantities of pollutants to the waters of the State or if a facility inspection required by paragraph H of this condition indicates that an amendment is needed. The plan should also be amended if the discharger is in violation of any conditions of this permit, or has not achieved the general objective of controlling pollutants in storm water discharges. Amendments to the plan shall be made within 30 days of any proposed construction or operational changes at the facility, and shall be provided to the Agency for review upon request.

E. The plan shall provide a description of potential sources which may be expected to add significant quantities of pollutants to storm water discharges, or which may result in non-storm water discharges from storm water outfalls at the facility. The plan shall include, at a minimum, the following items:

1. A topographic map extending one-quarter mile beyond the property boundaries of the facility, showing: the facility, surface water bodies, wells (including injection wells), seepage pits, infiltration ponds, and the discharge points where the facility's storm water discharges to a municipal storm drain system or other water body. The requirements of this paragraph may be included on the site map if appropriate. Any map or portion of map may be withheld for security reasons.

2. A site map showing:

   i. The storm water conveyance and discharge structures;

   ii. An outline of the storm water drainage areas for each storm water discharge point;

   iii. Paved areas and buildings;

   iv. Areas used for outdoor manufacturing, storage, or disposal of significant materials, including activities that generate significant quantities of dust or particulates.

   v. Location of existing storm water structural control measures (dikes, coverings, detention facilities, etc.);

   vi. Surface water locations and/or municipal storm drain locations

vii. Areas of existing and potential soil erosion;

viii. Vehicle service areas;

ix. Material loading, unloading, and access areas.

x. Direction of Stormwater Flow;

xi. Locations of stormwater monitoring points;

xii. Location of any potable water supply wells;

xiii. Fueling stations;

xiv. Immediate access roads and rail lines;

xv. Vehicle or product machinery related to industrial activity;

xvi. Locations and sources of run-on to the site from adjacent properties that contain significant quantities of pollutants;

xvii. Locations of any material storage areas (i.e. deicing materials, fertilizers, soil stockpiles, etc.)

xviii. Areas under items iv and xviii above may be withheld from the site for security reasons.

3. A narrative description of the following:

   i. The nature of the industrial activities conducted at the site, including a description of significant materials that are treated, stored or disposed of in a manner to allow exposure to storm water;

   ii. Materials, equipment, and vehicle management practices employed to minimize contact of significant materials with storm water discharges;

   iii. Existing structural and non-structural control measures to reduce pollutants in storm water discharges;

   iv. Industrial storm water discharge treatment facilities;

   v. Methods of onsite storage and disposal of significant materials.

4. A list of the types of pollutants that have a reasonable potential to be present in storm water discharges in significant quantities. Also provide a list of any pollutant that is listed as impaired in the most recent 303(d) report.

5. An estimate of the size of the facility in acres or square feet, and the percent of the facility that has impervious areas such as pavement or buildings.

6. A summary of existing sampling data describing pollutants in storm water discharges.

F. The plan shall describe the storm water management controls which will be implemented by the facility. The appropriate controls shall reflect identified existing and potential sources of pollutants at the facility. The description of the storm water management controls shall include:

1. Storm Water Pollution Prevention Personnel - Identification by job titles of the individuals who are responsible for developing, implementing, and revising the plan.

2. Preventive Maintenance - Procedures for inspection and maintenance of storm water conveyance system devices such as oil/water separators, catch basins, etc., and inspection and testing of plant equipment and systems that could fail and result in discharges of pollutants to storm water.

3. Good Housekeeping - Good housekeeping requires the maintenance of clean, orderly facility areas that discharge storm water. Material handling areas shall be inspected and cleaned to reduce the potential for pollutants to enter the storm water conveyance system.

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Special Conditions

4. Spill Prevention and Response - Identification of areas where significant materials can spill into or otherwise enter the storm water conveyance systems and their accompanying drainage points. Specific material handling procedures, storage requirements, spill cleanup equipment and procedures should be identified, as appropriate. Internal notification procedures for spills of significant materials should be established. The Permittee must conduct spill prevention and response measures, including but not limited, to the following:

   i. Plainly label containers (e.g., "Used Oil," "Spent Solvents," "Fertilizers and Pesticides") that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response if spills or leaks occur.

   ii. Implement procedures for material storage and handling, such as the use of secondary containment and barriers between material storage and traffic areas, or a similarly effective means designed to prevent the discharge of pollutants from these areas;

   iii. Develop spill response training procedures for preventing, containing, and cleaning up leaks, spills, and other releases. Spills shall be cleaned and any contaminated water oar solids shall be disposed of in accordance with applicable regulations. As appropriate, execute such procedures as soon as possible;

   iv. Keep spill kits on-site, in easily accessible locations,

   v. Notify appropriate facility personnel, and for significant spills, emergency response agencies and regulatory agencies, when a leak, spill, or other release occurs;

   vi. Document all significant spills and leaks of oil or toxic or hazardous pollutants that actually occurred in the exposed areas, or that drained to a storm water conveyance, during the previous 5 years;

   vii. Visually inspect retained storm water (e.g. storm water in a secondary containment structure) prior to discharge, to assure the stormwater contains no unnatural turbidity, color, oil films, foams, settleable solids, or deposits before discharging and collected stormwater.

5. Storm Water Management Practices - Storm water management practices are practices other than those which control the source of pollutants. They include measures such as installing oil and grit separators, diverting storm water into retention basins, etc. Based on assessment of the potential of various sources to contribute pollutants, measures to remove pollutants from storm water discharge shall be implemented. In developing the plan, the following management practices shall be considered:

   i. Containment - Storage within berms or other secondary containment devices to prevent leaks and spills from entering storm water runoff. To the maximum extent practicable storm water discharged from any area where material handling equipment or activities, raw material, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water should not enter vegetated areas or surface waters or infiltrate into the soil unless adequate treatment is provided.

   ii. Oil & Grease Separation - Oil/water separators, booms, skimmers or other methods to minimize oil contaminated storm water discharges.

   iii. Debris & Sediment Control - Screens, booms, sediment ponds or other methods to reduce debris and sediment in storm water discharges.

   iv. Waste Chemical Disposal - Waste chemicals such as antifreeze, degreasers and used oils shall be recycled or disposed of in an approved manner and in a way which prevents them from entering storm water discharges.

   v. Storm Water Diversion - Storm water diversion away from materials manufacturing, storage and other areas of potential storm water contamination. Minimize the quantity of storm water entering areas where material handling equipment of activities, raw material, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water using green infrastructure techniques where practicable in the areas outside the exposure area, and otherwise divert storm water away from exposure area.

   vi. Covered Storage or Manufacturing Areas - Covered fueling operations, materials manufacturing and storage areas to prevent contact with storm water.

   vii. Storm Water Reduction - Install vegetation on roofs of buildings within adjacent to the exposure area to detain and evapotranspirate runoff where precipitation falling on the roof is not exposed to contaminants, to minimize storm water

runoff; capture storm water in devices that minimize the amount of storm water runoff and use this water as appropriate based on quality.

viii. Use of grading, berming, or curbing to prevent runoff of contaminated flows and divert run-on away from these areas;

ix. Ensure that all wash water, with the exception of discharges from pavement wash water and routine building washdown, drains to a sanitary sewer, sump, or other proper collection system (i.e. not the stormwater drainage system).

x. Minimize dust and offsite tracking of raw, final, and waste materials. Trash disposal areas where dumpsters and roll off boxes are located shall have the lids which shall remain closed when not in use. For dumpsters and roll off boxes that do not have lids BMPs shall be utilized to prevent any contaminated storm water runoff.

6. Sediment and Erosion Prevention - The plan shall identify areas which due to topography, activities, or other factors, have a high potential for significant soil erosion. The plan shall describe measures to limit erosion.

7. Employee Training - Employee training programs shall inform personnel at all levels of responsibility of the components and goals of the storm water pollution control plan. Training should address topics such as spill response, good housekeeping and material management practices. The plan shall identify periodic dates for such training.

8. Inspection Procedures - Qualified plant personnel shall be identified to inspect designated equipment and plant areas. A tracking or follow-up procedure shall be used to ensure appropriate response has been taken in response to an inspection. Inspections and maintenance activities shall be documented and recorded.

9. De-icing Material Storage – Storage piles of deicing material used onsite or for other commercial or industrial purposes must be enclosed or covered to prevent exposure to precipitation (except for exposure resulting from adding or removing materials from the pile). The Permittee must document and implement appropriate pollution prevention measures that minimize exposure to stormwater when adding to or removing material from the pile. Piles do not need to be enclosed or covered where storm water from the pile is not discharge to Waters of the United States or the discharges from the piles are authorized under another permit. The Permittee must document the location of any storage piles of deicing material to be used for deicing or for other commercial or industrial use in the SWPPP site map.

G. Non-Storm Water Discharge - The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharge. The certification shall include a description of any test for the presence of non-storm water discharges, the methods used, the dates of the testing, and any onsite drainage points that were observed during the testing. Any facility that is unable to provide this certification must describe the procedure of any test conducted for the presence of non-storm water discharges, the test results, potential sources of non-storm water discharges to the storm sewer, and why adequate tests for such storm sewers were not feasible.

H. Quarterly Visual Observation of Discharges - The requirements and procedures for quarterly visual observations are applicable to all outfalls covered by this condition.

1. You must perform and document a quarterly visual observation of a storm water discharge associated with industrial activity from each outfall. The visual observation must be made during daylight hours. If no storm event resulted in runoff during daylight hours from the facility during a monitoring quarter, you are excused from the visual observations requirement for that quarter, provided you document in your records that no runoff occurred. You must sign and certify the document.

2. Your visual observation must be made on samples collected as soon as practical, but not to exceed 1 hour or when the runoff or snow melt begins discharging from your facility. All samples must be collected from a storm event discharge that is greater than 0.1 inch in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The observation must document: color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. If visual observations indicate any unnatural color, odor, turbidity, floatable material, oil sheen or other indicators of storm water pollution, the permittee shall obtain a sample and monitor for the parameter or the list of pollutants in Part E.4.

3. You must maintain your visual observation reports onsite with the SWPPP. The report must include the observation date and time, inspection personnel, nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.

4. You may exercise a waiver of the visual observation requirement at a facility that is inactive or unstaffed, as long as there are

no industrial materials or activities exposed to storm water. If you exercise this waiver, you must maintain a certification with your SWPPP stating that the site is inactive and unstaffed, and that there are no industrial materials or activities exposed to storm water.

5. Representative Outfalls - If your facility has two or more outfalls that you believe discharge substantially identical effluents, based on similarities of the industrial activities, significant materials, size of drainage areas, and storm water management practices occurring within the drainage areas of the outfalls, you may conduct visual observations of the discharge at just one of the outfalls and report that the results also apply to the substantially identical outfall(s).

6. The visual observation documentation shall be made available to the Agency and general public upon written request.

I. The permittee shall conduct an annual facility inspection to verify that all elements of the plan, including the site map, potential pollutant sources, and structural and non-structural controls to reduce pollutants in industrial storm water discharges are accurate. Observations that require a response and the appropriate response to the observation shall be retained as part of the plan. Records documenting significant observations made during the site inspection shall be submitted to the Agency in accordance with the reporting requirements of this permit.

J. This plan should briefly describe the appropriate elements of other program requirements, including Spill Prevention Control and Countermeasures (SPCC) plans required under Section 311 of the CWA and the regulations promulgated there under, and Best Management Programs under 40 CFR 125.100.

K. The plan is considered a report that shall be available to the public at any reasonable time upon request.

L. The plan shall include the signature and title of the person responsible for preparation of the plan and include the date of initial preparation and each amendment thereto.

M. Facilities which discharge storm water associated with industrial activity to municipal separate storm sewers may also be subject to additional requirement imposed by the operator of the municipal system

Construction Authorization

Authorization is hereby granted to construct treatment works and related equipment that may be required by the Storm Water Pollution Prevention Plan developed pursuant to this permit.

This Authorization is issued subject to the following condition(s).

N. If any statement or representation is found to be incorrect, this authorization may be revoked and the permittee there upon waives all rights there under.

O. The issuance of this authorization (a) does not release the permittee from any liability for damage to persons or property caused by or resulting from the installation, maintenance or operation of the proposed facilities; (b) does not take into consideration the structural stability of any units or part of this project; and (c) does not release the permittee from compliance with other applicable statutes of the State of Illinois, or other applicable local law, regulations or ordinances.

P. Plans and specifications of all treatment equipment being included as part of the stormwater management practice shall be included in the SWPPP.

Q. Construction activities which result from treatment equipment installation, including clearing, grading and excavation activities which result in the disturbance of one acre or more of land area, are not covered by this authorization. The permittee shall contact the IEPA regarding the required permit(s).

REPORTING

R. The annual inspection report shall include results of the annual facility inspection which is required by Part I of this condition. The report shall also include documentation of any event (spill, treatment unit malfunction, etc.) which would require an inspection, results of the inspection, and any subsequent corrective maintenance activity. The report shall be completed and signed by the authorized facility employee(s) who conducted the inspection(s). The annual inspection report is considered a public document that shall be available at any reasonable time upon request.

S. The first report shall contain information gathered during the one year time period beginning with the effective date of coverage under this permit and shall be submitted no later than 60 days after this one year period has expired. Each subsequent report shall contain

the previous year's information and shall be submitted no later than one year after the previous year's report was due.

T. If the facility performs inspections more frequently than required by this permit, the results shall be included as additional information in the annual report.

U. The permittee shall retain the annual inspection report on file at least 3 years. This period may be extended by request of the Illinois Environmental Protection Agency at any time.

Annual inspection reports shall be submitted electronically at epa.npdes.inspection@illinois.gov or mailed to the following address:

Illinois Environmental Protection Agency
Bureau of Water
Compliance Assurance Section
Annual Inspection Report
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

SPECIAL CONDITION 15. The Permittee shall, within twelve (12) months of the effective date of this permit, prepare and submit to the Agency a feasibility study that identifies the method, timeframe, and costs of reducing phosphorus levels in the discharge from Outfall 002 to a level consistently meeting a potential future effluent limit of 1 mg/L, 0.5 mg/L and 0.1 mg/ and reducing total nitrogen levels to a future target concentration of 10 mg/L. The study shall evaluate the construction and O & M costs of the application of these limits on a monthly, seasonal and annual average basis. The study should include a plan to monitor the influent and effluent to and from the waste water treatment plant at a sampling frequency that will provide sufficient information to understand variability in concentrations due to day-to-day changes in production and seasonal variability. The study should also evaluate the potential land application and/or spray irrigation of all or a portion of the effluent. The influents and effluents shall be sampled for phosphorus and total nitrogen.

SPECIAL CONDITION 16. The Permittee shall develop and submit to the Agency a Phosphorus and Total Nitrogen Discharge Optimization Plan for Outfall 002 within twelve (12) months of the effective date of this permit. The plan shall include a schedule for the implementation of these optimization measures. Annual progress reports on the optimization of the existing treatment facilities shall be submitted to the Agency by March 31 of each year. In developing the plan, the Permittee shall evaluate a range of measures for reducing phosphorus and Total Nitrogen discharges from the treatment plant, including possible source reduction measures, operational improvements, and minor facility modifications that will optimize reductions in phosphorus and total nitrogen discharges from the wastewater treatment facility. The Permittee's evaluation shall include, but not be limited to, an evaluation of the following optimization measures:

A. WWTF influent reduction measures.

1. Identify any products (i.e.. cleaning detergents, water treatment additives, etc.) contributing phosphorus to the Outfall 002 effluent . Eliminate any product which has an acceptable phosphorus-free alternative and minimize the use and/or discharge of any phosphorus containing products which can not be eliminated.

2. Identify any potential storm water controls which may be implemented to prevent or minimize storm water exposure to sources of nitrogen and phosphorus at the facility.

B. WWTF effluent reduction measures.

1. Reduce phosphorus and total nitrogen discharges by optimizing existing treatment processes.

a. Adjust the solids retention time for nitrification, denitrification, or biological phosphorus removal.

b. Adjust aeration rates to reduce dissolved oxygen and promote simultaneous nitrification-denitrification.

c. Add baffles to existing units to improve microorganism conditions by creating divided anaerobic, anoxic, and aerobic zones.

d. Change aeration settings in plug flow basins by turning off air or mixers at the inlet side of the basin system.

e. Minimize impact on recycle streams by improving aeration within holding tanks.

f. Reconfigure flow through existing basins to enhance biological nutrient removal.

g. Increase volatile fatty acids for biological phosphorus removal.

SPECIAL CONDITION 17. The Study and Plan noted in Special Conditions 15 and 16 shall be submitted electronically at EPA.PrmtSpecCondtns@Illinois.gov or mailed to the Agency at the address below.

Illinois Environmental Protection Agency
Division of Water Pollution Control
Attention: Compliance Assurance Section, Mail Code # 19
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

Standard Conditions

Definitions

Act means the Illinois Environmental Protection Act, 415 ILCS 5 as Amended.

Agency means the Illinois Environmental Protection Agency.

Board means the Illinois Pollution Control Board.

Clean Water Act (formerly referred to as the Federal Water Pollution Control Act) means Pub. L. 92-500, as amended. 33 U.S.C. 1251 et seq.

NPDES (National Pollutant Discharge Elimination System) means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 402, 318 and 405 of the Clean Water Act.

USEPA means the United States Environmental Protection Agency.

Daily Discharge means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurements, the "daily discharge" is calculated as the average measurement of the pollutant over the day.

Maximum Daily Discharge Limitation (daily maximum) means the highest allowable daily discharge.

Average Monthly Discharge Limitation (30 day average) means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Average Weekly Discharge Limitation (7 day average) means the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

Best Management Practices (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Aliquot means a sample of specified volume used to make up a total composite sample.

Grab Sample means an individual sample of at least 100 milliliters collected at a randomly-selected time over a period not exceeding 15 minutes.

24-Hour Composite Sample means a combination of at least 8 sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over a 24-hour period.

8-Hour Composite Sample means a combination of at least sample aliquots of at least 100 milliliters, collected at period intervals during the operating hours of a facility over an 8-hou period.

Flow Proportional Composite Sample means a combination sample aliquots of at least 100 milliliters collected at periodi intervals such that either the time interval between each aliquot o the volume of each aliquot is proportional to either the stream flo at the time of sampling or the total stream flow since the collectio of the previous aliquot.

(1) **Duty to comply.** The permittee must comply with al conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds fo enforcement action, permit termination, revocation and reissuance, modification, or for denial of a permit renewa application. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirements.

(2) **Duty to reapply.** If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. If the permittee submits a proper application as required by the Agency no later than 180 days prior to the expiration date, this permit shall continue in full force and effect until the final Agency decision on the application has been made.

(3) **Need to halt or reduce activity not a defense.** It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(4) **Duty to mitigate.** The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

(5) **Proper operation and maintenance.** The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up, or auxiliary facilities, or similar systems only when necessary to achieve compliance with the conditions of the permit.

(6) **Permit actions.** This permit may be modified, revoked and reissued, or terminated for cause by the Agency pursuant to 40 CFR 122.62 and 40 CFR 122.63. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

(7) **Property rights.** This permit does not convey any property rights of any sort, or any exclusive privilege.

(8) **Duty to provide information.** The permittee shall furnish to the Agency within a reasonable time, any information which the Agency may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with the permit. The permittee shall also furnish to the Agency upon request, copies of records required to be kept by this permit.

(9) **Inspection and entry**. The permittee shall allow an authorized representative of the Agency or USEPA (including an authorized contractor acting as a representative of the Agency or USEPA), upon the presentation of credentials and other documents as may be required by law, to:

(a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

(d) Sample or monitor at reasonable times, for the purpose of assuring permit compliance, or as otherwise authorized by the Act, any substances or parameters at any location.

(10) **Monitoring and records**.

(a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

(b) The permittee shall retain records of all monitoring information, including all calibration and maintenance records, and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of this permit, measurement, report or application. Records related to the permittee's sewage sludge use and disposal activities shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503). This period may be extended by request of the Agency or USEPA at any time.

(c) Records of monitoring information shall include:

(1) The date, exact place, and time of sampling or measurements;

(2) The individual(s) who performed the sampling or measurements;

(3) The date(s) analyses were performed;

(4) The individual(s) who performed the analyses;

(5) The analytical techniques or methods used; and

(6) The results of such analyses.

(d) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit. Where no test procedure under 40 CFR Part 136 has been approved, the permittee must submit to the Agency a test method for approval. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals to ensure accuracy of measurements.

(11) **Signatory requirement**. All applications, reports or information submitted to the Agency shall be signed and certified.

(a) **Application**. All permit applications shall be signed as follows:

(1) For a corporation: by a principal executive officer of at least the level of vice president or a person or position having overall responsibility for environmental matters for the corporation:

(2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

(3) For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official.

(b) **Reports**. All reports required by permits, or other information requested by the Agency shall be signed by a person described in paragraph (a) or by a duly authorized representative of that person. A person is a duly authorized representative only if:

(1) The authorization is made in writing by a person described in paragraph (a); and

(2) The authorization specifies either an individual or a position responsible for the overall operation of the facility, from which the discharge originates, such as a plant manager, superintendent or person of equivalent responsibility; and

(3) The written authorization is submitted to the Agency.

(c) **Changes of Authorization**. If an authorization under (b) is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of (b) must be submitted to the Agency prior to or together with any reports, information, or applications to be signed by an authorized representative.

(d) **Certification**. Any person signing a document under paragraph (a) or (b) of this section shall make the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

(12) **Reporting requirements**.

(a) **Planned changes**. The permittee shall give notice to the Agency as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required when:

(1) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source pursuant to 40 CFR 122.29 (b); or

(2) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements pursuant to 40 CFR 122.42 (a)(1).

(3) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

(b) **Anticipated noncompliance**. The permittee shall give advance notice to the Agency of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

(c) **Transfers**. This permit is not transferable to any person except after notice to the Agency.

(d) **Compliance schedules**. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

(e) **Monitoring reports**. Monitoring results shall be reported at the intervals specified elsewhere in this permit.

(1) Monitoring results must be reported on a Discharge Monitoring Report (DMR).

(2) If the permittee monitors any pollutant more frequently than required by the permit, using test procedures approved under 40 CFR 136 or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.

(3) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Agency in the permit.

(f) **Twenty-four hour reporting.** The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24-hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and time; and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. The following shall be included as information which must be reported within 24-hours:

(1) Any unanticipated bypass which exceeds any effluent limitation in the permit.

(2) Any upset which exceeds any effluent limitation in the permit.

(3) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Agency in the permit or any pollutant which may endanger health or the environment.

The Agency may waive the written report on a case-by-case basis if the oral report has been received within 24-hours.

(g) **Other noncompliance.** The permittee shall report all instances of noncompliance not reported under paragraphs (12) (d), (e), or (f), at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (12) (f).

(h) **Other information.** Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application, or in any report to the Agency, it shall promptly submit such facts or information.

(13) **Bypass.**

(a) Definitions.

(1) Bypass means the intentional diversion of waste streams from any portion of a treatment facility.

(2) Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

(b) Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs (13)(c) and (13)(d).

(c) Notice.

(1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.

(2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in paragraph (12)(f) (24-hour notice).

(d) Prohibition of bypass.

(1) Bypass is prohibited, and the Agency may tal enforcement action against a permittee f bypass, unless:

(i) Bypass was unavoidable to prevent loss of lif personal injury, or severe property damage;

(ii) There were no feasible alternatives to th bypass, such as the use of auxiliary treatmer facilities, retention of untreated wastes, maintenance during normal periods equipment downtime. This condition is nc satisfied if adequate back-up equipment shoul have been installed in the exercise reasonable engineering judgment to prevent bypass which occurred during normal period of equipment downtime or preventiv maintenance; and

(iii) The permittee submitted notices as require under paragraph (13)(c).

(2) The Agency may approve an anticipated bypass after considering its adverse effects, if the Agency determines that it will meet the three conditions listed above in paragraph (13)(d)(1).

(14) **Upset.**

(a) Definition. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

(b) Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph (14)(c) are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

(c) Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An upset occurred and that the permittee can identify the cause(s) of the upset;

(2) The permitted facility was at the time being properly operated; and

(3) The permittee submitted notice of the upset as required in paragraph (12)(f)(2) (24-hour notice).

(4) The permittee complied with any remedial measures required under paragraph (4).

(d) Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

(15) **Transfer of permits.** Permits may be transferred by modification or automatic transfer as described below:

(a) Transfers by modification. Except as provided in paragraph (b), a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued pursuant to 40 CFR 122.62 (b) (2), or a minor modification made pursuant to 40 CFR 122.63 (d), to identify the new permittee and incorporate such other requirements as may be necessary under the Clean Water Act.

(b) Automatic transfers. As an alternative to transfers under paragraph (a), any NPDES permit may be automatically transferred to a new permittee if:

(1) The current permittee notifies the Agency at least 30 days in advance of the proposed transfer date;
(2) The notice includes a written agreement between the existing and new permittees containing a specified date for transfer of permit responsibility, coverage and liability between the existing and new permittees; and
(3) The Agency does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement.

(16) All manufacturing, commercial, mining, and silvicultural dischargers must notify the Agency as soon as they know or have reason to believe:
(a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant identified under Section 307 of the Clean Water Act which is not limited in the permit, if that discharge will exceed the highest of the following notification levels:
(1) One hundred micrograms per liter (100 ug/l);
(2) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6 dinitrophenol; and one milligram per liter (1 mg/l) for antimony.
(3) Five (5) times the maximum concentration value reported for that pollutant in the NPDES permit application; or
(4) The level established by the Agency in this permit.
(b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the NPDES permit application.

(17) All Publicly Owned Treatment Works (POTWs) must provide adequate notice to the Agency of the following:
(a) Any new introduction of pollutants into that POTW from an indirect discharge which would be subject to Sections 301 or 306 of the Clean Water Act if it were directly discharging those pollutants; and
(b) Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
(c) For purposes of this paragraph, adequate notice shall include information on (i) the quality and quantity of effluent introduced into the POTW, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

(18) If the permit is issued to a publicly owned or publicly regulated treatment works, the permittee shall require any industrial user of such treatment works to comply with federal requirements concerning:
(a) User charges pursuant to Section 204 (b) of the Clean Water Act, and applicable regulations appearing in 40 CFR 35;
(b) Toxic pollutant effluent standards and pretreatment standards pursuant to Section 307 of the Clean Water Act; and
(c) Inspection, monitoring and entry pursuant to Section 308 of the Clean Water Act.

(19) If an applicable standard or limitation is promulgated under Section 301(b)(2)(C) and (D), 304(b)(2), or 307(a)(2) and that effluent standard or limitation is more stringent than any effluent limitation in the permit, or controls a pollutant not limited in the permit, the permit shall be promptly modified or revoked, and reissued to conform to that effluent standard or limitation.

(20) Any authorization to construct issued to the permittee pursuant to 35 Ill. Adm. Code 309.154 is hereby incorporated by reference as a condition of this permit.

(21) The permittee shall not make any false statement, representation or certification in any application, record, report, plan or other document submitted to the Agency or the USEPA, or required to be maintained under this permit.

(22) The Clean Water Act provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Clean Water Act is subject to a civil penalty not to exceed $25,000 per day of such violation. Any person who willfully or negligently violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318 or 405 of the Clean Water Act is subject to a fine of not less than $2,500 nor more than $25,000 per day of violation, or by imprisonment for not more than one year, or both. Additional penalties for violating these sections of the Clean Water Act are identified in 40 CFR 122.41 (a)(2) and (3).

(23) The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than $20,000 per day of violation, or by imprisonment of not more than 4 years, or both.

(24) The Clean Water Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

(25) Collected screening, slurries, sludges, and other solids shall be disposed of in such a manner as to prevent entry of those wastes (or runoff from the wastes) into waters of the State. The proper authorization for such disposal shall be obtained from the Agency and is incorporated as part hereof by reference.

(26) In case of conflict between these standard conditions and any other condition(s) included in this permit, the other condition(s) shall govern.

(27) The permittee shall comply with, in addition to the requirements of the permit, all applicable provisions of 35 Ill. Adm. Code, Subtitle C, Subtitle D, Subtitle E, and al applicable orders of the Board or any court with jurisdiction.

(28) The provisions of this permit are severable, and if any provision of this permit, or the application of any provision o this permit is held invalid, the remaining provisions of thi permit shall continue in full force and effect.